

Appl. No. 10/693,361

Response dated February 9, 2006

~~Reply to Office Action of November 9, 2005~~

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (original) An absorbable polymer for biomedical and pharmaceutical applications comprising a segmented copolyester having at least one side group comprising a succinic anhydride moiety per chain.
2. (original) An absorbable polymer as in claim 1 made by the process comprising the steps of:

providing an absorbable, segmented copolyester; and

reacting the copolyester with maleic anhydride in the presence of a free-radical initiator.
3. (original) An absorbable polymer as in claim 2 wherein the step of reacting the copolyester with maleic anhydride is achieved in an organic solvent.
4. (original) An absorbable polymer as in claim 2 wherein the step of providing an absorbable, segmented copolyester comprises copolymerizing two or more cyclic monomers selected from the group consisting of trimethylene carbonate, ϵ -caprolactone, glycolide, lactide, p-dioxanone, and 1,5-dioxepan-2-one.
5. (original) An absorbable polymer as in claim 2 wherein the step of providing an absorbable, segmented copolyester comprises end-grafting a polyalkylene succinate with one or more cyclic monomers selected from the group consisting of trimethylene carbonate, ϵ -caprolactone, glycolide, lactide, p-dioxanone, and 1,5-dioxepan-2-one.

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6. (original) An absorbable polymer as in claim 5 wherein the polyalkylene succinate comprises polytrimethylene succinate.
7. (original) An absorbable polymer as in claim 5 wherein the polyalkylene succinate comprises polyethylene succinate.
8. (original) An absorbable polymer as in claim 2 wherein the step of providing an absorbable, segmented copolyester comprises end-grafting a polyalkylene glycol with one or more cyclic monomers selected from the group consisting of trimethylene carbonate, ϵ -caprolactone, glycolide, lactide, p-dioxanone, and 1,5-dioxepan-2-one.
9. (original) An absorbable polymer as in claim 8 wherein the polyalkylene glycol comprises polyethylene glycol.
10. (original) An absorbable polymer as in claim 8 wherein the polyalkylene glycol comprises a block copolymer comprising polyoxyethylene and polyoxypropylene components.
11. (original) An absorbable polymer as in claim 2 further comprising the step of hydrolyzing the anhydride moiety, thereby forming at least one dicarboxylic acid side group per chain.
12. (original) An absorbable polymer as in claim 1 wherein the polymer is a liquid at room temperature.
13. (withdrawn) An absorbable polymer comprising a functionalized block copolymer of polyethylene glycol and propylene glycol, the block copolymer comprising more than three carboxyl groups per chain.

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14. (withdrawn) An absorbable polymer as in claim 13 made by the process comprising the steps of:

providing a block copolymer of polyethylene glycol and propylene glycol;

reacting the block copolymer with an unsaturated anhydride selected from the group consisting of maleic anhydride and itaconic anhydride in the presence of a free-radical initiator; and hydrolyzing the resultant anhydride bearing block copolymer.

15. (withdrawn) An absorbable polymer as in claim 13 wherein the polymer is a liquid at room temperature.

16. (withdrawn) A liquid absorbable polymer comprising a polyester having at least two carboxyl-groups per chain.

17. (withdrawn) A liquid absorbable polymer as in claim 16 made by the process comprising the step of polymerizing at least one cyclic monomer in the presence of a hydroxy carboxylic acid initiator.

18. (withdrawn) A liquid absorbable polymer as in claim 17 wherein the step of polymerizing at least one cyclic monomer in the presence of a hydroxy carboxylic acid initiator comprises polymerizing a mixture of trimethylene carbonate and glycolide in the presence of malic acid.

19. (withdrawn) A liquid absorbable polymer as in claim 17 wherein the step of polymerizing at least one cyclic monomer in the presence of a hydroxy carboxylic acid

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initiator comprises polymerizing a mixture of trimethylene carbonate and dl-lactide in the presence of malic acid.

20. (withdrawn) A liquid absorbable polymer as in claim 17 wherein the step of polymerizing at least one cyclic monomer in the presence of a hydroxy carboxylic acid initiator comprises polymerizing a mixture of trimethylene carbonate and dl-lactide in the presence of citric acid.